

QUALITY ASSURANCE PROJECT PLAN
for
COOK INLET TRIBES'
SUBSISTENCE CONSUMPTION ASSESSMENT

Prepared by:
SELDOVIA VILLAGE TRIBE
ENVIRONMENTAL AND NATURAL RESOURCE PROGRAM
P. O. Drawer L
Seldovia, AK 99663
Ph: (907) 234-7898
Fax: (907) 234-7865
e-mail: svt@svt.org
homepage: www.svt.org

Prepared for:
THE VILLAGE COUNCILS OF PORT GRAHAM, NANWALEK, AND TYONEK

Submitted for consideration to:
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10

Date
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APPROVALS:

Crystal Collier, President/Chief Executive Officer Seldovia Village Tribe	Date
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Michael Opheim, Environmental Coordinator Seldovia Village Tribe	Date
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Ginna Grepo-Grobe, Quality Assurance Manager U.S. EPA Region 10	Date
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Katherine Brown, Project Officer Tribal Trust and Assistance Unit Office of Ecosystems, Tribal and Public Affairs U.S. EPA, Region 10	Date
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ACKNOWLEDGEMENTS

This Quality Assurance Project Plan (QAPP) is written and presented in order to satisfy federal EPA requirements.

The SELDOVIA VILLAGE TRIBE (SVT) developed portions of this QAPP from similar plans developed by the Wampanoag Tribe of Gay Head and the attached questionnaire form (see Appendices) based on the Columbia River Inter-Tribal Fish Commission. We very much appreciate the above-mentioned Tribal organizations for their work in developing the most appropriate language and format for survey QAPPs and questionnaire forms specific to Native Tribes, which we used as templates. We especially wish to thank the Village Council members and Tribal staff of Port Graham, Nanwalek, and Tyonek for their collaboration and efforts to make this project happen. We also wish to thank EPA for funding this project.

DISTRIBUTION LIST

Official copies of this QAPP, accompanying documents, and any subsequent revisions will be provided to EPA and all those named on the approval page of this document. Addresses and other contact information for those named on the approval page of this document are as follows:

Name:	Crystal Collier
Title:	President/Chief Executive Officer
Organization:	Seldovia Village Tribe
Phone:	(907) 234-7898 ext. 242
E-mail:	ccollier@svt.org

Name:	Michael Opheim
Title:	Environmental Coordinator
Organization:	Seldovia Village Tribe
Phone:	(907) 234-7898 ext. 222
E-mail:	mopheim@svt.org

Name:	Ginna Grepo-Grove
Title:	Quality Assurance Manager
Organization:	U.S. EPA, Region 10
Phone:	(206) 553-1632
E-mail:	grepo-grove.gina@epa.gov

Name:	Katherine Brown
Title:	Project Officer
Organization:	Tribal Trust and Assistance Unit Office of Ecosystems, Tribal and Public Affairs U.S. EPA, Region 10
Phone:	(206) 553-7263

PROJECT BACKGROUND

The Alaska native villages (tribes) of Seldovia, Port Graham, Nanwalek, and Tyonek share the rich subsistence resources of Cook Inlet (chitons, fish, crab, shrimp, clams, mussels, octopus, sea birds and marine mammals (sea otters, seals, sea lions, beluga)) and have relied on these resources for thousands of years. Cook Inlet is a large tidal estuary in south-central Alaska that connects to the Gulf of Alaska. It extends northeast from the Gulf of Alaska along the south-central Alaskan coast between the Kenai and Alaska Peninsulas. Cook Inlet is about 170 miles long. Seldovia, Port Graham, and Nanwalek are located along the southwest portion of the Kenai Peninsula while Tyonek is located along the northwest shore of Upper Cook Inlet. The subsistence-based culture, subsistence harvests, as well as economic dependence on local commercial harvests, of Cook Inlet Tribal members require that the local environment remains healthy. On and offshore oil and gas activities occur within the upper portions of Cook Inlet. Since drilling operations began in the 1960s, offshore drilling for oil and gas in Cook Inlet has generated more than 978 million barrels of treated wastewater. Production water from these shore-based facilities is discharged to Cook Inlet following treatment (either directly from the on-shore facilities or from platforms). Contaminants are generated from these operations and enter Cook Inlet through the treated wastewaters and drilling mud. Chemicals found in treated wastewater and drilling mud include oil, grease, mercury, cadmium, barium sulfite, and chemical additives such as flocculants, oxygen scavengers, biocides, cleansers, and scale corrosion inhibitors. It is estimated that 253 tons of oil are discharged into Cook Inlet, alone, from treated wastewaters each year (MMS 2003). Additionally, Cook Inlet receives about an average of 182.3 thousand cubic meters per day of wastewater from 10 municipalities (MMS 2003). Tyonek is within 10 miles from the nearest oil and gas operations while Seldovia is approximately 117 miles away and Port Graham and Nanwalek are about 128 miles away (USEPA 2000, 2003).

Much concern exists over the risk posed to human health through exposure to these contaminants through the consumption of traditional subsistence foods. Traditional foods comprise 40 percent to 90 percent of rural Alaskan diets and therefore high levels of contaminants in these resources can be especially dangerous to Alaska natives (ATSDR 2009). One of the most important subsistence resources to Tribal members in the Cook Inlet region is salmon. In a previous study, as part of an attempt to determine present contaminant levels in fish and other traditional foods, fish samples (whole fish, fish fillets, and halibut roasts) collected in 1997 and 2002 were analyzed for heavy metals (arsenic, cadmium, chromium, lead, nickel, selenium, and methyl mercury), pesticides, dioxins, and polychlorinated biphenyls (ATSDR 2009). However, data for whole fish and fish fillet samples were not used to assess chemical exposures from eating specific portions of fish, such as liver, kidney, organs, skin, heads, etc. In 2003, a survey was conducted by the nearby Village of Port Graham to determine information about native food consumption. The survey results indicated a much higher estimated daily fish ingestion rate for Cook Inlet Tribal members compared to the national rate

used by the US EPA. The survey, though, did not collect information on fish consumption in elementary age and preschool children nor address such factors as fish preparation methods, cooking methods, or breastfeeding. PCBs tend to concentrate in the fatty portions of the fish as well as in the heads, skin, guts, liver, and eggs (roe). Baking, broiling, grilling, or steaming may reduce PCBs and other chemicals, compared to frying with breading and/or batter, since they allow the fats and juices to drain away from the fish. Cooking also helps to reduce the level of many chemical contaminants present in a fish compared to eating it raw. Furthermore, certain toxic contaminants can be passed to newborn infants from their mother's breast milk and so female respondents should be asked whether they have given birth, whether the child or children had been or are being breast fed, and at what age their child ceased or will cease breastfeeding.

In the summer of 2013, SVT has planned to conduct an assessment of toxins and chemicals in the tissues of marine species commonly harvested by Cook Inlet Tribal members, such as salmon, halibut, clams, mussels, and chitons. Other marine species that are considered part of the Tribal diet are: lingcod, grey cod, black rock fish, rainbow trout, dolly varden trout, steelhead, lake trout, black cod, pollock, flounder, tom cod, red rock fish, greenling, herring, sculpin, dogfish shark, salmon shark, eulachon, harbor seal, and sea birds (ducks). A tissue study should provide an estimate of the bioaccumulated toxins within commonly eaten locally available marine species. A consumption assessment will assist the Tribe in developing a tissue-sampling plan and risk communication strategy, which correlates with current observed Tribal consumption patterns. This assessment will not be used to develop historical consumption patterns for Tribal members. Moreover, the information contained in the questionnaire forms is personal to Tribal members and therefore confidential and so considered confidential personal privacy information as defined in the Freedom of Information Act (FOIA) 40 CFR sec 2.200, and may also qualify as confidential business information pursuant to FOIA.

PRIMARY STUDY GOAL

Determine a credible non-commercially plus commercially obtained fish and shellfish consumption rate (expressed in grams/person/day) by Cook Inlet Tribal members during all four seasons of the previous year. This survey is not intended to assess historical fish consumption rates. It is intended to accurately describe the current observed consumption rate of Cook Inlet Tribal members.

OBJECTIVES

Collect data and information on overall consumption by Cook Inlet Tribal members of fish and other subsistence foods obtained from harvests and grocery stores.

1. Identify the most frequented specific locations where fish species (regularly consumed by Tribal members) are harvested from.

2. *Create a questionnaire that will provide a credible description of the current consumption habits of subsistence foods (both whole and parts) of Tribal members in regards to seasonality, special events/ceremonies, and during breast feeding.*
3. *Estimate average daily consumption of fish by adults (18 years old and up).*
4. *Obtain information of fish consumption by children (17 years old and younger).*
5. *Interview 19 adult Tribal members from each of three Cook Inlet villages (Port Graham, Nanwalek, and Tyonek) with questionnaire to have a sample size comparable to Seldovia.*
6. *Statistically identify the number of Tribal members that consume fish and other subsistence food*

PROJECT PERSONNEL

The majority of project work will be conducted by the Tribal staff of each participating Village, specifically through three locally hired interviewers. However, the EPA Environmental Coordinator and Environmental Assistant of Seldovia Village Tribe (SVT) will provide resources, training, oversight and supervision, and all forms for the assessment to be conducted in each Village. SVT's Environment Assistant will serve as the Project Manager and will perform his/her various duties under the direction and oversight of SVT's Environmental Coordinator. SVT's Environmental Coordinator, in turn, reports to the President/CEO of Seldovia Village Tribe, Crystal Collier, and the Tribal Council. Interviewers will conduct the interviews according to the procedures outlined in this Quality Assurance Project Plan and report to SVT's Environmental Assistant and Environmental Coordinator.

Position Title: IGAP Environmental Coordinator

Michael Opheim is the IGAP Environmental Coordinator for Seldovia Village Tribe. His main work involves overseeing and implementing SVT's EPA / IGAP Programs and associated projects. Michael and his assistant will be facilitating and supervising the majority of the work in this project in collaboration with Environmental staff and Council members from the Villages of Port Graham, Nanwalek, and Tyonek.

SVT's Environmental Coordinator and Assistant are the primary contacts for technical objectives, analytical procedures, QA requirements, problem resolution and general implementation of the QAPP. The IGAP Environmental Coordinator oversees all aspects of the COOK INLET TRIBES' SUBSISTENCE CONSUMPTION ASSESSMENT. Key project members from each Village (including hired interviewers) will be thoroughly instructed in the specific procedures, methods, and quality assurance guidelines prior to Tribal member interviews. They will be encouraged to complete research and training courses provided by groups and agencies such as EPA. The IGAP Environmental Coordinator may also fulfill the duties of the Environmental Assistant as needed.

Position Title: IGAP Environmental Assistant

Tracie Merrill is the IGAP Environmental Assistant for Seldovia Village Tribe. Her main work involves conducting monitoring and sampling for SVT's various environmental programs/projects and managing data.

PROJECT ORGANIZATION

The population sizes of the four Tribes at this time varies. Based in part on financial and logistical constraints, a total sample size of 76 interviews has been chosen for the assessment. Because the population sizes of the Tribes vary to such an extent, equal numbers of interviews from each of the four Tribes will be sought for comparison purposes. Thus, approximately 19 interviews per Tribe will be sought (each from a different Tribal household). In situations where multiple families reside together in a single dwelling, "household" is defined as the property owner's or renter's immediate family (spouse and children). Nineteen interviews have already been conducted between November 2011 and February 2012 for Tribal members living in Seldovia essentially following the same methods proposed in this QAPP. This sample size was based on 1) statistical analyses of Seldovia's population and 2) realistic expectations of expected response rates.

Tribal members will be selected for in-person interviews conducted by two of three interviewers hired locally from each participating Village. Tribal members selected to do the interviews will be randomly chosen from Tribal member registry lists. Before any selection process takes place, however, Tribal members under the age of 18 will be removed from the registry lists as well as known non-resident Tribal members. "Resident" is defined as presently residing in one of the participating Villages. Remaining names on the list will then each be assigned a number. Using a random integer generator, numbers will be generated and if a Tribal member's number is one of the first 19 to be generated, then they will be contacted for an interview. Selected Tribal members will be attempted to be contacted to schedule interviews 4 times before considering them to be "unreachable." In the event of interview refusals or not being able to successfully contact selected Tribal members, other Tribal members will be contacted in the order that their assigned numbers appear on the random number table until the quota of 19 interviews is achieved. Attempts will be made to contact selected Tribal members who had no valid phone number by sending them a letter informing them of the assessment and asking them to contact Tribal staff to arrange an appointment or by speaking to them in-person (if possible). As interviews progress, the names of adult Tribal members residing in the same households as interviewed members will continuously be removed from the sample set upon completion of those interviews.

Interviewees will be shown food models approximating 3 and 5 ounce portions of fish. During the interview, if a Tribal member answers "yes" to having children 17 years or younger living in their household, they will be asked to provide additional dietary information for the youngest child. Preferably, all interviews will be conducted at a

central location within each Village. However, interviews may be conducted at the homes of Tribal members in the event they cannot physically travel to the location or are very uncomfortable conducting the interview at the location.

PROJECT SCHEDULE

Three interviewers will be locally hired in each of the participating Villages (Port Graham, Nanwalek, and Tyonek) to carry out the scope of the project work. However, project facilitation, resources (forms, food models, digital recorders, etc.), training, and supervision will be the responsibility of SVT Environmental staff. Tribal members will be contacted for interviews in April 2012. Within each Village, all interviews will preferably take place over a period of two days in May 2012.

QAPP Approval with EPA consultation	March-April 2012
Final Assessment forms approved	March-April 2012
Interviewers hired in each Village	March-April 2012
Training of interviewers	April 2012
Interviews conducted in Villages	May 2012
Data entered, reviewed, and analyzed by SVT staff	June-August 2012
Draft report of data collected	September-October 2012

ASSESSMENT TARGET POPULATION AND DESIGN

For consistency, only adult Tribal members (18 years or older) from the Villages of Port Graham, Nanwalek, and Tyonek will be interviewed and interviews will be sought from Tribal members representing different households within each Village. Eligibility will be based on Tribal member registry lists from each Village.

Data will be collected for the assessment using stratified systematic sampling, with each of the four Tribes participating in this project (Seldovia, Port Graham, Nanwalek, and Tyonek) considered an independent stratum, or subpopulation. The final results will represent all four Tribes as a single population. To obtain an unbiased estimate of the population mean of this set of pooled data, it will be necessary to weight the collected data according to the proportion of each subpopulation sampled. Samples for each of the four Tribes will be the same size. Since the population sizes of the four Tribes are very different, the data will be weighted before combining it, using weighting factors based on the population sizes of each Tribe. Since the percentage of individuals represented in the larger Tribes is smaller than the percentage of individuals represented in the smaller Tribes, it will be necessary to give more weight to responses from individuals in the larger Tribes. Data concerning each individual Tribe will not be weighted.

WEIGHTING FORMULA

For each Tribe: (Population size of Tribe/Sample size of Tribe)

QUALITY CONTROL FOR INTERVIEWING

- Interviewers will read and follow *EPA's Guidance for conducting fish and wildlife consumption surveys*
http://water.epa.gov/scitech/swguidance/fishshellfish/techguidance/upload/1999_11_05_fish_fishguid.pdf.
- Drafts of the questionnaire form (see Appendix E) and this QAPP will be approved by EPA, and revised accordingly, before being implemented in interviews.
- At least one pre-test interview will be given by interviewers.
- Before each interview begins, the interviewee will be read a confidentiality statement (see Appendix B).
- All interviewees will sign consent forms (see Appendix C) before interviews begin with the interviewee having the right to end the interview at any time.
- A Quality Assurance Monitor will be present during all interviews to observe and monitor. The Quality Assurance Monitor will be, either 1) SVT's Environmental Assistant, 2) SVT's Environmental Coordinator, or 3) a designated Tribal staff member as agreed upon prior to interviews being conducted. At the end of each interview, if needed, a de-briefing session will be held between the Quality Assurance Monitor and the interviewer to review any improvements that could be made in interviewing technique.
- Each interview will be recorded provided the interviewee gives consent.
- Food models representing approximately 3 oz and 5 oz fish portions will be shown to interviewees when being asked questions about amounts of fish to increase accuracy (see Appendix G).
- Alaska Fish ID books will be made accessible and available to interviewees during interviews (see Appendix H).
- Number of completed interviews will be tracked by interviewers and SVT's Environmental Assistant and Coordinator.
- A checklist form will be followed by the interviewers during the interviews to facilitate consistency and dissemination of information to interviewee (see Appendix D).

QUALITY CONTROL FOR DATA ENTRY, MANAGEMENT, STORAGE, AND ANALYSIS

- Tribal members will be selected for interviews randomly.
- A contact activity log will be used when contacting Tribal members for interviews (see Appendix A).
- Interviewers will manually fill out the questionnaire forms during the interviews.
- At the end of each interview, a Quality Assurance Monitor will screen the completed questionnaire to insure accuracy, legibility, and completeness of the form. The Quality Assurance Monitor will initial and date the form to document acceptability.
- Raw data will be given to SVT Environmental staff and directly entered into a Microsoft Excel Spreadsheet from pre-coded (i.e. numbered) questionnaires.
- Raw data will be entered into a Microsoft Excel Spreadsheet where mathematical calculations, if applicable, are performed by the spreadsheet using formulas.
- Personnel will review data entries to decrease transcription errors.
- If transcription errors are found, that data will be corrected and highlighted with a comment placed noting the date of change, the reason for changing it, and who changed it.
- Hard copies and/or originals of completed questionnaires, consent forms, check list forms, and contact activity log sheets will be filed in a designated “survey” folder at SVT’s offices.
- Interviewers and Quality Assurance Monitors will receive procedural training and instruction to be eligible to collect data for this project.
- Interviewers and Quality Assurance Monitors will attend on- going training as time and resources allow, to review interviewing procedures, ask questions and fine-tune skills.
- Data that do not meet quality objectives will not be used.
- Based upon 24 hour memory recall of dietary information provided by interviewee, if data is deemed by interviewer and Quality Assurance Monitor to be unreliable, the data will not be used.

- Any statistical analyses performed on data will be verified for appropriateness and accuracy by an outside agency, such as personnel from Alaska Native Tribal Health Consortium (ANTHC).

QUALITY CONTROL FOR CONFIDENTIALITY

- No personal information will be entered with data from completed questionnaires. Each completed questionnaire will be assigned a number and the number will be used to identify and reference data from specific interviews. These same questionnaire numbers will be used on check list forms to reference specific interviews.
- Respondent code numbers will be used on contact activity log sheets instead of names to reference specific interviewees.
- No other individuals, other than the interviewee, the interviewer, and the Quality Assurance Monitor will be present in the room during an interview.
- At the beginning of each interview, the interviewer will read to the interviewee a confidentiality statement without any additions or deletions to the information.
- Assessment documents pertaining to the interviews will be kept in secured storage.
- No personal statements made by the interviewee during the interview, which could potentially identify the interviewee, will be shared.

FINAL REPORT

The results of this study shall be summarized in a final report. Ms. Merrill and Mr. Opheim will prepare the report. The final report shall include a summary of assessment methods and a description of unusual occurrences. Confidentiality will be expressed and participants, EPA, and Village Council members will be given the results of the assessment upon completion of the final project. Personal data is considered confidential pursuant to the FOIA exemption for personal privacy. The information contained in this survey is personal to Tribal members and therefore confidential and so considered confidential personal privacy information as defined in the Freedom of Information Act (FOIA) 40 CFR sec 2.200, and may also qualify as confidential business information pursuant to FOIA.

REFERENCES

(ATSDR) Agency for Toxic Substances and Disease Registry. 2009. Evaluation of seafood and plant data collected from Cook Inlet near the native villages of Port

Graham, Nanwalek, Seldovia, and Tyonek, Alaska. Atlanta (GA): US Department of Health and Human Services.

(MMS) Mineral Management Service Alaska OCS Region. 2003. Final environmental impact statement: Cook Inlet planning area oil and gas lease sales 191 and 199. US Department of the Interior. Last revised 2011 May 19 (cited 2011 June 20). Available from: <http://www.mms.gov/Alaska/ref/AKPUBS.HTM>.

(USEPA) US Environmental Protection Agency. 2000. Human health risk assessment of chemical contaminants in seafood from Cook Inlet, Alaska (Draft Report, Version 2). Washington DC (VA): USEPA.

(USEPA) US Environmental Protection Agency. 2003. Survey of chemical contaminants in fish, invertebrates, and plants collected in the vicinity of Tyonek, Seldovia, Port Graham, and Nanwalek-Cook Inlet, AK. Seattle (WA): USEPA. Report No: 910-R-01-003.

Wampanoag Tribe of Gay Head (Aquinnah). 2002. Wampanoag Tribe of Gay Head (Aquinnah) fish & shellfish consumption survey. Gay Head (MA): Wampanoag Tribe of Gay Head (Aquinnah).

Columbia River Inter-Tribal Fish Commission. 1994. A fish consumption survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin. Portland (OR): Columbia River Inter-Tribal Fish Commission.

LIST OF ATTACHMENTS

Attachment A - Contact Activity Log
Attachment B - Confidentiality Statement
Attachment C - Consent Form
Attachment D - Check List Form
Attachment E - Draft Survey Questionnaire
Attachment F - Reference Maps for identifying fishing locations
Attachment G - Pictures of food models
Attachment H - Bibliographic list of fish id books that will be made available to interviewees

Respondent Code #: _____

APPENDIX A CONTACT ACTIVITY LOG

VILLAGE: _____

DATE CONTACTED TO ESTABLISH INTERVIEW:

Enter month/day/year, and time of day. Allow up to four attempts to arrange an appointment. Enter Code NR for no response, LM for left message with someone who answered the phone or answering machine/voice message, C for completed call.

1) Date	2) Date	3) Date	4) Date
Time	Time	Time	Time
Code	Code	Code	Code

INTERVIEW APPOINTMENT DATE/TIME/LOCATION (Use 2 and 3 only if respondent asks to change original appointment. Circle either board room or fill in "other" for location).

1) MONTH/DAY/TIME (original)

LOCATION

2) MONTH/DAY/TIME (1st change)

LOCATION

3) MONTH/DAY/TIME (2nd change)

LOCATION

INTERVIEWER'S NAME

RESULT (Circle One)

1) Completed interview - Questionnaire Code # _____

2) Missed appointment – need to reschedule

3) Refused to participate:

Reason _____

4) Could not be contacted for interview

5) Interview not completed

Reason _____

Additional Comments

APPENDIX B

COOK INLET SUBSISTENCE CONSUMPTION ASSESSMENT – CONFIDENTIALITY STATEMENT

Interviewer: Please read as stated below without additions or deletions to the information provided to the respondent.

Hello, my name is _____ and I represent the _____ Tribe. We appreciate your willingness to participate in this survey.

The information given in response to this questionnaire will help the Tribes of Seldovia, Port Graham, Nanwalek, and Tyonek understand actual rates of fish consumption, as well as that of other subsistence foods, by Tribal members, what species are regularly eaten, how fish meals are prepared and cooked, and the locations of where fish are harvested from.

All of the personal identification information which you provide to us during the interview is confidential. The information you share with us will be given to Seldovia Village Tribe's environmental department and will be entered into a database belonging to their office department. Your responses to the questions will be combined with those of others so that your answers cannot be identified. No personal identifiers will be used. You will only be identified by a number system. Once the survey is complete, there will be a report completed summarizing the results. All participating members of the Tribe will be sent a copy of this report.

The interview will take about a half-hour to hour. It has 5 sections. To begin with, I'm going to ask you to sign a consent form and to provide some general background information. By signing the consent form, you will be granting your permission to conduct the interview, for the above mentioned Tribes to use the information you have provided, and acknowledging being read this confidentiality statement. Additionally, on the consent form, you will be asked to check a box indicating whether you give or do not give permission for the interview to be recorded. We would like to tape-record the interview to insure accuracy and to help with verification of the data. At the beginning, I will also be documenting the time and date of the interview. In section 1 of the questionnaire form, I will be asking you to list everything you have eaten or drank in the past 24 hours as a memory-recall exercise. In section 2, I'll be asking you questions about what kinds of fish you eat, how much you eat, and how that fish is typically cooked or prepared. In section 3, if there is a child who is 17 years or younger living in your household, I will ask you to provide the same type of information as you gave in section 2 for the youngest child in your household. Any information given about the child will also be confidential in the same ways as mentioned in the above paragraph. If applicable, I may ask you some additional questions regarding nursing. Section 4 contains questions about what kinds of non-fish subsistence foods you eat and how much you eat of them. In the final section (section 5), I will ask you questions about where and how you obtain fish. This may include asking you to mark on a map where you typically harvest particular fish species.

At the end of this interview, upon request, you will be given the contact information of myself or of other Tribal staff involved in this project in case you have any questions or concerns. At this time, do you have any questions for me?

APPENDIX C
COOK INLET SUBSISTENCE FOOD ASSESSMENT
CONSENT FORM

I understand that I am being asked to participate in a survey/questionnaire activity, which will be conducted in-person, that will help the Tribes of Seldovia, Port Graham, Nanwalek, and Tyonek gather information about the actual rates of fish consumption, as well as that of other subsistence foods, by Tribal members, what species are regularly eaten, how fish meals are prepared and cooked, and the locations of where fish are harvested from.

I have been read a confidentiality statement by the interviewer and have been given general information about the project and the types of questions I can expect to answer about myself and potentially a child (17 years old or younger) living in my household. I understand that any information I provide will be kept confidential, used only for the purposes of this study, and will not be used in any way that can identify me or the child. I understand that by checking one of the boxes below, I will be either giving or not giving consent for the interview to be recorded. All survey/questionnaire responses, notes, tapes, and records will be kept in a secured environment.

I understand that my participation in this project is completely voluntary and that I am free to decline to participate, without consequence, at any time prior to or at any point during the interview. Should I decline to participate, I understand that any information I have provided to the interviewer will be destroyed.

I understand that there are no risks involved in participating in this activity, beyond those risks experienced in everyday life.

I have read the information above. By signing below and returning this form, I am consenting to participate in this survey/questionnaire project as designed by the Seldovia Village Tribe and acknowledging that I have personally checked one of the boxes below.

Please check box

- ☐ I agree to have the interview tape-recorded
- ☐ I do not agree to have the interview tape-recorded

Participant's Name _____

Signature _____ Date _____

APPENDIX D

CHECK LIST FOR SUBSISTENCE CONSUMPTION INTERVIEWS

To be checked off by Interviewer

- ☐ Confidentiality statement disclosed to interviewee
- ☐ Signed consent form by interviewee
- ☐ Audio recorder turned on (*if applicable*)
- ☐ Start time of interview recorded
- ☐ Name and phone number recorded for interviewee
- ☐ End time of interview recorded
- ☐ Audio recorder turned off (*if applicable*)
- ☐ Number assigned to completed questionnaire
- ☐ Initials of Quality Assurance Monitor on completed questionnaire
- ☐ Contact information given to interviewee (*if applicable*)

Interviewer _____ Date _____

APPENDIX E QUESTIONNAIRE FORM

QUESTIONNAIRE NUMBER _____

2012 Subsistence Food Dietary Assessment of Seldovia, Port
Graham, Nanwalek, and Tyonek Tribes of Cook Inlet, AK



**IMPORTANT: READ CONFIDENTIALITY STATEMENT TO RESPONDENT
BEFORE BEGINNING INTERVIEW AND HAVE RESPONDENT SIGN CONSENT FORM**

BACKGROUND INFORMATION TO ASK PERSON BEING INTERVIEWED:

Interviewer fills out this section:

Month/Day

Date __/ __

Village _____

Sex of person being interviewed: (Circle Male or Female)

Male Female

Time Interview Begins: __: __ AM/PM [Circle AM or PM]

1) Name: _____

2) Phone: ()- ____ - _____

3) What was the month and year of your birth?

Month _____ Year _____

QUESTIONNAIRE NUMBER _____

SECTION 1 - MEMORY RECALL

I am now going to ask you to remember all of the food and drinks that you ate yesterday, from the time you woke up in the morning until the time you went to sleep for the night. In addition to asking you about the type of food, I'll show you some examples of serving sizes in order to determine the amount you actually ate.

DIETARY INTAKE - 24 HOUR RECALL

<u>Intake Day</u>		<u>Interviewer's Opinion of Information</u>		<u>Intake Was</u>	
Sunday	1	Thursday	6	Reliable	1
Monday	2	Friday	6	Unable to recall one or more meals	2
Tuesday	3	Saturday	7	Unavailable for other reasons	3
Wednesday	4				
				Typical	1
				Considerably less than typical	2
				Considerably more than typical	3

Line No.		Time Eaten		Where Prepared	Food and Beverages	Amount (ozs.)	Complete Description
		A = AM	P = PM				
1				1 = Home			
2				2 = Restaurant			
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

COMMENTS (Give line no. when appropriate):

Interviewer fills out this section:

Intake day ____ (1-7)

Opinion of Information ____ (1-3)

Intake was ____ (1-3)

QUESTIONNAIRE NUMBER _____

DIETARY INTAKE CONTINUATION PAGE

Intake Day
 Sunday 1
 Monday 2
 Tuesday 3
 Wednesday 4
 Thursday 5
 Friday 6
 Saturday 7

Interviewer's Opinion of Information
 Reliable 1
 Unable to recall one or more meals 2
 Unreliable for other reasons 3

Intake Was
 Typical 1
 Considerably less than typical 2
 Considerably more than typical 3

Line No.	Time Eaten		Food and Beverages	Amount (ozs.)	Complete Description
	A = AM P = PM				
	Hour	Min			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

COMMENTS (Give line no. when appropriate):

Interviewer fills out this section:

Intake day ____ (1-7)

Opinion of Information ____ (1-3)

Intake was ____ (1-3)

SECTION 2 – ADULT CONSUMPTION OF FISH

1) During which two months of the year would you say you eat the most fish? *[Circle response(s)]*

January	September
February	October
March	November
April	December
May	All months the same
June	Never/rarely eat fish <i>(skip to Question #7)</i>
July	Unknown
August	

2) During the months you indicated you eat the most fish, about how many meals of fish do you eat on a weekly basis? (Remember to include fish consumed for breakfast, lunch, dinner, and snacks).

Avg. # of fish meals weekly: _____ (two highest months)

3) During which two months would you say you usually eat the least fish? *[Circle response(s)]*

January	September
February	October
March	November
April	December
May	All months the same
June	Never/rarely eat fish <i>(skip to TABLE 2)</i>
July	Unknown
August	All months except 2 (marked in question 1) are equally low

4) During the months you indicated you eat the least fish, about how many meals of fish do you eat on a weekly basis?

Avg. # of fish meals weekly: _____ (two lowest months)

5) On average, throughout the year, about how many fish meals weekly do you eat?

Avg. # of fish meals weekly: _____ (throughout year)

6) What is the average portion size of fish you eat in a meal that includes fish?

[SHOW THE RESPONDENT FOOD MODELS, AND ENTER THE AVERAGE SERVING SIZE IN OUNCES]

Average serving size (ounces): _____

I am now going to ask you some questions on specific types of fish that can be obtained from Cook Inlet. For each type of fish I mention, I am going to ask you several questions concerning how often you eat it and which parts of the fish are usually eaten. (See Table 1)

Table 1.

Type of fish (Circle yes if commonly eaten)	Average number of meals per month	Parts usually consumed for each species (circle answer)					
		Fillet	Skin	Head	Eggs	Bones	Other Organs
Sockeye Salmon Yes No (if Yes, go to next columns)		Yes	Yes	Yes	Yes	Yes	Yes
Chinook Salmon Yes No		No	No	No	No	No	No
Coho Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
Pink Salmon Yes No		No	No	No	No	No	No
Chum Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
Halibut Yes No		No	No	No	No	No	No
Lingcod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
Grey Cod Yes No		No	No	No	No	No	No
Black Rockfish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
Rainbow Trout Yes No		No	No	No	No	No	No
Dolly Varden Trout Yes No		Yes	Yes	Yes	Yes	Yes	Yes
Steelhead Yes No		No	No	No	No	No	No
Lake Trout Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No

Table 1 Continued

Type of fish (Circle yes if commonly eaten)	Average number of meals per month	Parts usually consumed for each species (circle answer)					
		Fillet	Skin	Head	Eggs	Bones	Other Organs
Black Cod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Pollock Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Flounder Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Tom Cod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Red Rockfish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Greenling Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Herring Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Sculpin Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Dogfish Shark Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Salmon Shark Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Eulachon or Hooligan Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Pike Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Smelt Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Whitefish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Needlefish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Bullhead Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No

Please tell me about how fish is usually (throughout the year) prepared or cooked in your home (more than 1 selection from the following may be given). Please also indicate how often fish is prepared/cooked in that particular manner. (See Table 2)

Table 2.

Is the fish ever ... (Circle Yes if cooked that way)		HOW OFTEN? (Circle 1, 2, or 3)		
		Once a week or more	Less than once a week, but more than or equal to once a month	Less than once a month
a. pan-fried?	Yes...1 → No ...2 go to b.	1	2	3
b. deep-fried?	Yes...1 → No ...2 go to b.	1	2	3
c. poached in water?	Yes...1 → No ...2 go to b.	1	2	3
d. boiled as soup or stew?	Yes...1 → No ...2 go to b.	1	2	3
e. baked? (Includes fish pie or Perok)	Yes...1 → No ...2 go to b.	1	2	3
f. broiled?	Yes...1 → No ...2 go to b.	1	2	3
g. smoked?	Yes...1 → No ...2 go to b.	1	2	3
h. dried or dried into a powder?	Yes...1 → No ...2 go to b.	1	2	3
i. eaten raw? (Includes pickled)	Yes...1 → No ...2 go to b.	1	2	3
j. roasted over an open fire or barbecued?	Yes...1 → No ...2 go to b.	1	2	3
k. canned? (Includes jarred and kippered)	Yes...1 → No ...2 go to b.	1	2	3
l. salted?	Yes...1 → No ...2 go to b.	1	2	3

SECTION 3 – CHILD CONSUMPTION OF FISH

7) Do you regularly prepare the meals in your household? (*Circle Yes or No*)

Yes No

8) Are there any children 5 years or younger living in your household? (*Circle Yes or No*)

Yes No

IF NO, GO TO QUESTION 9

If YES, CONTINUE WITH REST OF QUESTION 8

8A. Please provide the following information for the youngest person in your household who is 17 years of age or less:

First Name _____

Male or Female (*Circle Male or Female*)

In what month and year was this child born:

__/____

Your relationship to child (*Enter mother, father, aunt, uncle, etc.*)

8B. Throughout the year, what is the average portion size of fish this child eats in a meal that includes fish? [*SHOW THE RESPONDENT FOOD MODELS, AND ENTER THE AVERAGE SERVING SIZE IN OUNCES OR CIRCLE "EATS NO FISH"*]

Average serving size (ounces): __ __ ounces

Eats no fish

IF THEY ANSWERED "EATS NO FISH," SKIP TO QUESTION #9

8C. A few minutes ago you described which types of fish you eat and which parts are normally consumed. This information was put into Table 1 (*SHOW TABLE*). For the child listed, please provide the same information on a separate table (*Table 3*).

Table 3.

Type of fish (Circle yes if commonly eaten)	Average number of meals per month	Parts usually consumed for each species (circle answer)					
		Fillet	Skin	Head	Eggs	Bones	Other Organs
Sockeye Salmon Yes No (if Yes, go to next columns)		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Chinook Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Coho Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Pink Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Chum Salmon Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Halibut Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Lingcod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Grey Cod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Black Rockfish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Rainbow Trout Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Dolly Varden Trout Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Steelhead Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Lake Trout Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No

Table 3 Continued

Type of fish (Circle yes if commonly eaten)	Average number of meals per month	Parts usually consumed for each species (circle answer)					
		Fillet	Skin	Head	Eggs	Bones	Other Organs
Black Cod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Pollock Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Flounder Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Tom Cod Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Red Rockfish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Greenling Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Herring Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Sculpin Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Dogfish Shark Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Salmon Shark Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Eulachon or Hooligan Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Pike Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Smelt Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Whitefish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Needlefish Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No
Bullhead Yes No		Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No

8D. On average, throughout the entire year, about how many fish meals weekly does the child eat?

Avg. # of fish meals weekly: _____

8E. At what age (in months) did the child begin eating meals that include fish?
[ENTER NUMBER OF MONTHS OR CIRCLE EITHER "NOT YET" OR "UNKNOWN"]

_____ Months (ONLY FILL IN MONTHS OR
YEARS, NOT BOTH)

_____ Years (ONLY FILL IN MONTHS OR
YEARS, NOT BOTH)

Not Yet

Unknown

9) IF RESPONDENT IS MALE, SKIP TO QUESTION #10

The next few questions are being asked to get better information on the diet of very young children in relation to nursing.

SKIP TO QUESTION 9C, IF THEY ANSWERED "MOTHER" IN
QUESTION 8A

SKIP TO QUESTION 9B, IF THEY ANSWERED "GRANDMOTHER OR GREAT
GRANDMOTHER" IN QUESTION 8A

9A. Have you ever given birth? (Circle Yes or No)

Yes

No

IF NO, SKIP TO QUESTION #10

9B. In what month and year was your last child born:

__/____

9C. Was this baby breast fed? (Circle Yes, No, Unknown)

Yes

No

Unknown

IF NO, SKIP TO QUESTION #10

9D. At what age (in months) did the child stop breast feeding? (ENTER NUMBER IN
MONTHS OR CIRCLE "STILL BREAST FEEDING")

__ months → SKIP TO QUESTION #10

Still breast feeding

9E. At what age (in months) do you plan to stop breast feeding your child?

__ months

SECTION 4 - OTHER SUBSISTENCE FOODS

10) I'm now going to ask you some questions about your consumption of marine mammals and other non-fish subsistence foods.

Table 4

Type of marine mammal (Circle yes if commonly eaten)	Average number of meals in a year	Parts usually consumed for each species (circle answer)						
		Meat	Ribs	Intestines	Liver	Blubber/Fat	Flippers	Other organs/Parts (example: oil)
Harbor Seal Yes No (if Yes, go to next columns)		Yes	Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No	No
Beluga Whale Yes No		Yes	Yes	Yes	Yes	Yes	Yes	Yes
		No	No	No	No	No	No	No

Answer Questions 11 through 14 only if respondent answers "yes" in Table 4 for consuming marine mammals - if not, skip to question #15.

11) How do you typically prepare harbor seal? If part is typically prepared this way, please put "X" under the cooking/preparation method

Part	Boiled	Fried	Other cooking method
Meat			
Ribs			
Intestines			
Liver			
Skin/Blubber or Fat			
Flippers			
Other (please specify)			

Please explain if "other" is filled in for seal part or for cooking method:

12) How much harbor seal meat (or parts) do you typically eat in a meal?

- Less than half a plate (regular dinner size plate)
- Half a plate (regular dinner size plate)
- A full plate (regular dinner size plate)
- More than one full plate (regular dinner size plate)

13) How do you typically prepare beluga whale? *If part is typically prepared this way, please put "X" under the cooking/preparation method*

Part	Boiled	Fried	Other cooking method
Meat			
Ribs			
Intestines			
Liver			
Skin/Blubber or Fat			
Flippers			
Other (please specify)			

Please explain if "other" is filled in for beluga part or for cooking method:

14) How much beluga meat (or parts) do you typically eat in a meal?

- Less than half a plate (regular dinner size plate)
- Half a plate (regular dinner size plate)
- A full plate (regular dinner size plate)
- More than one full plate (regular dinner size plate)

15) How often do you eat hidarkis (black leather chitons) in a year?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never → SKIP TO 17

16) How many ~~bidarkis~~ do you generally eat in a meal?

17) How often do you eat limpets (china caps) in a year?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 19

18) How many limpets (china caps) do you generally eat in a meal?

19) How often do you eat mussels harvested from local beaches?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 21

20) How many mussels do you generally eat in a meal?

21) How often do you eat butter clams harvested from local beaches?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 23

22) How many butter clams do you generally eat in a meal?

If respondent eats butter clams but gets them from other sources (like grocery stores):

Source(s): (please list)	# of clams (in a year) from source
_____	_____
_____	_____
_____	_____

23) How often do you eat steamers (or little neck) clams from local beaches?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 25

24) How many little neck clams do you generally eat in a meal?

If respondent eats steamers but gets them from other sources (like grocery stores):

Source(s): (please list)	# of clams (in a year) from source
_____	_____
_____	_____
_____	_____

25) How often do you eat snails in a year?

[FOR EACH SNAIL SPECIES, ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

Hairy tritons (large snails)

Periwinkles (very small snails)

_____ times a year

_____ times a year

Never - SKIP TO 27

Never - SKIP TO 27

26) How many snails do you generally eat in a meal? (Enter number for each snail species)

_____ **Hairy tritons**

_____ **Periwinkles**

27) How often do you eat octopus harvested from local beaches?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 29

28) How many ~~octopus~~ do you generally eat in a year?

29) How often do you eat sea birds (including ducks)?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never → SKIP TO 31

30) How many sea birds (including ducks) do you generally eat in a year?

SECTION 5 - OBTAINING FISH

31) These next questions deal with where and how you obtain fish and other species.

31A. Do you catch fish for either personal consumption or for use by your Tribe in some way?

Yes

No

IF NO, SKIP TO QUESTION #33

31B. Please indicate on the map(s) (show map(s)) where you usually catch the following species:

REFER TO MAPS – please write in locations as well next to species

Fish

Sockeye Salmon	_____
Chinook Salmon	_____
Coho Salmon	_____
Pink Salmon	_____
Chum Salmon	_____
Halibut	_____
Lingcod	_____
Grey Cod	_____
Black Rockfish	_____
Rainbow Trout	_____
Dolly Varden Trout	_____
Steelhead	_____
Lake Trout	_____
Black Cod	_____
Pollock	_____
Flounder	_____
Tom Cod	_____
Red Rockfish	_____
Greenling	_____
Herring	_____
Sculpin	_____
Dogfish Shark	_____
Salmon Shark	_____
Eulachon	_____
Pike	_____
Smelt	_____
Whitefish	_____
Needlefish	_____
Bullhead	_____

Marine Mammals

Harbor Seal	_____
Beluga Whale	_____

32) About how far from home do you usually travel to fish? (*Circle response*)

0-5 miles	21-25 miles
6-10 miles	26-50 miles
11-15 miles	51-75 miles
16-20 miles	76-100 miles
	more than 100 miles

This column
filled in by SVT
staff

33) Of all the fish you eat in a year, approximately how many do you get from:

	Total	Percent
Fish caught by yourself or family members	_____	_____
Grocery stores	_____	_____
Other sources:		
Friends who fish	_____	_____
Ceremonies (example: potlucks)	_____	_____
Distribution by the tribe	_____	_____
Other (list) (example: restaurants)	_____	_____
_____	_____	_____
_____	_____	_____

34) On average, throughout the year, how often do you attend ceremonies or other community events (examples: potlucks, weddings, etc.)? (*Circle response*)

never → END OF INTERVIEW
 less than 1 time per month
 1-3 times per month
 4-6 times per month
 more than 6 times per month

35) How often do you eat fish at these ceremonies? (*Circle response*)

rarely/never → END OF INTERVIEW
 less than ½ of the ceremonies or events
 at about ½ of the ceremonies or events
 at nearly all ceremonies or events

36) How much fish do you usually consume at each of these events?

none
 1-2 6oz servings
 3-4 6oz servings
 5-6 6oz servings
 more than 6 6oz servings

QUESTIONNAIRE NUMBER _____

CONCLUSION:

Thank you for your cooperation in participating in this survey. Your participation will significantly contribute to information needed to help protect your natural resources and provide guidance for public health programs for your tribe.

Time Interview Ends: _:_ _AM/PM [Circle AM or PM]

Section filled out by interviewer

Number assigned to adult interviewed:

Number assigned to child in household:

Survey received on _/_/_----

Section filled out by Quality Assurance Monitor

I have examined this questionnaire form and to my knowledge, the data has been recorded accurately and there is no missing data or incompleteness.

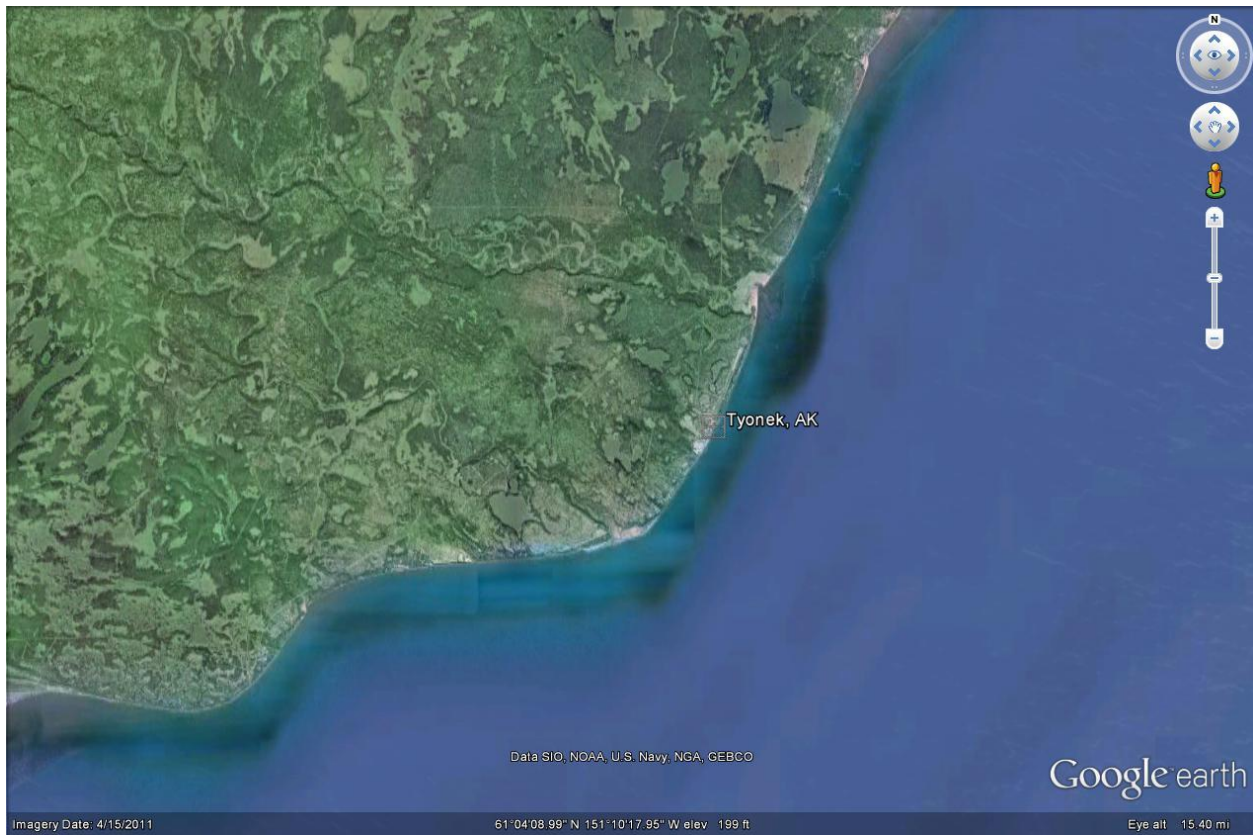
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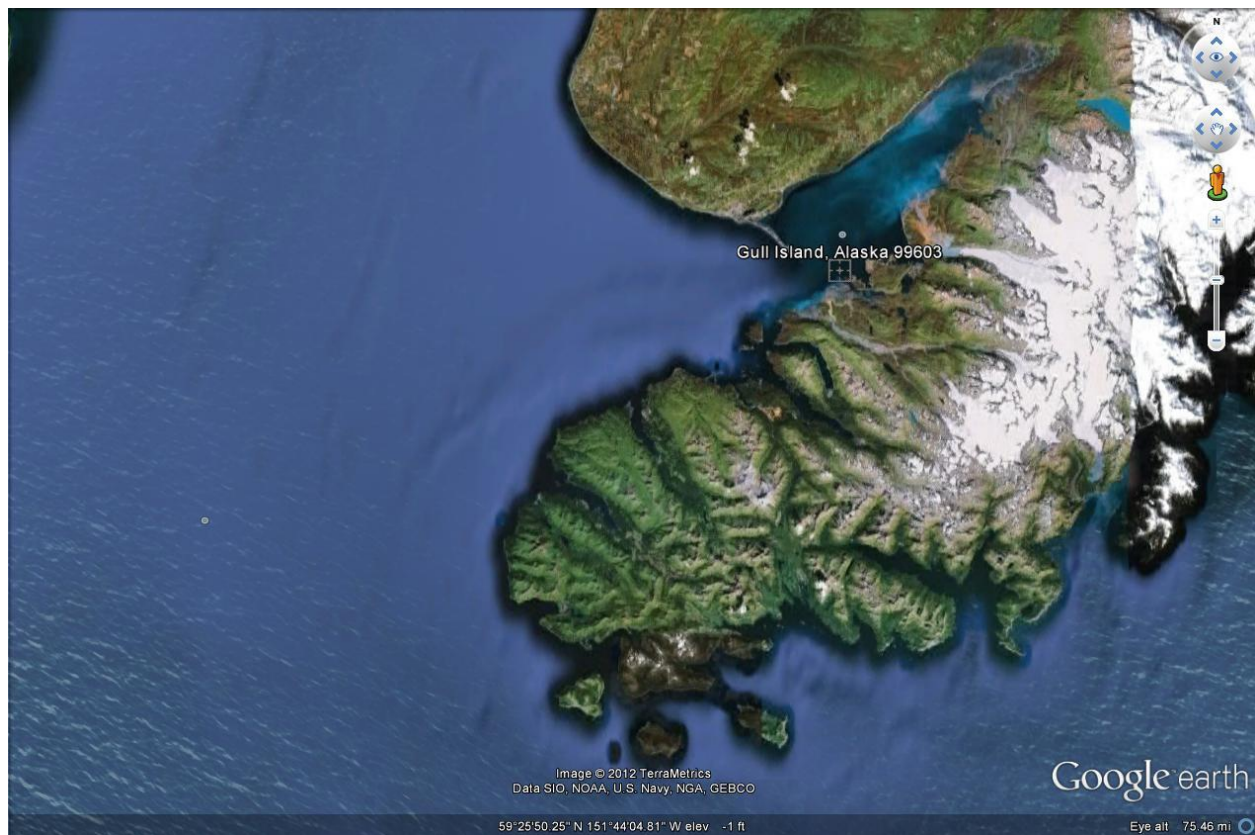
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APPENDIX F

REFERENCE MAPS FOR IDENTIFYING FISHING LOCATIONS

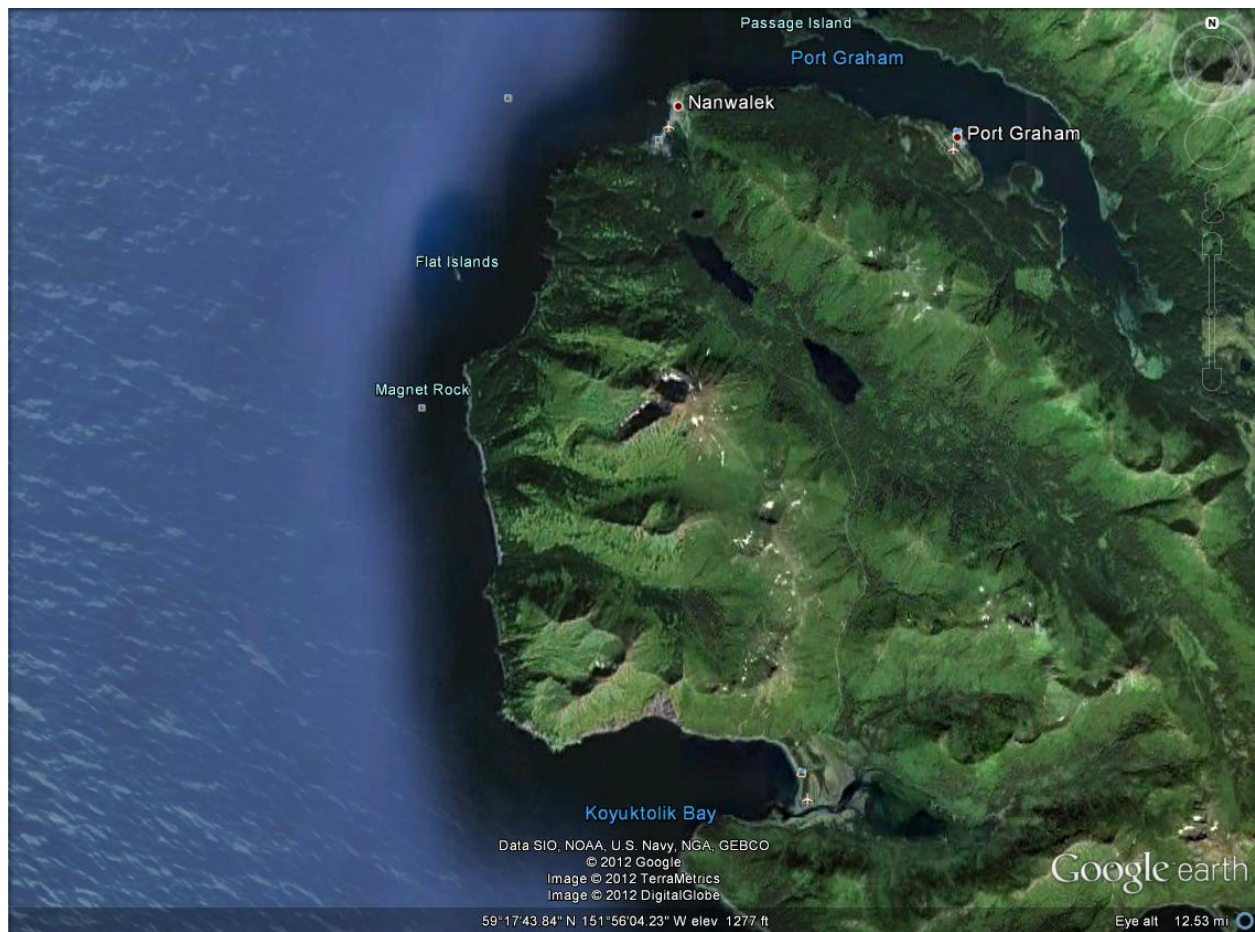






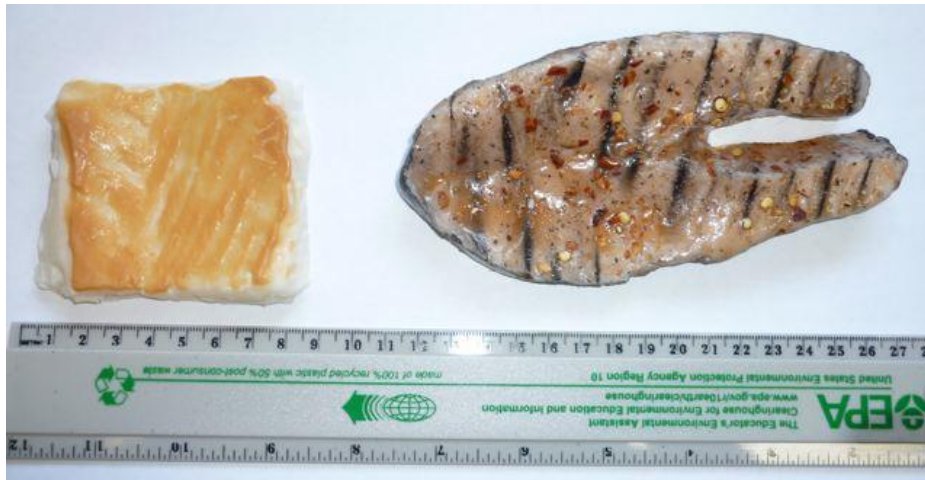








APPENDIX G PICTURES OF FOOD MODELS



APPENDIX H

BIBLIOGRAPHIC LIST OF FISH ID BOOKS IN THE COLLECTION OF SELDOVIA VILLAGE TRIBE'S ENVIRONMENTAL DEPARTMENT

Byersdorfer, SC, and Watson, LJ. 2010. Field guide to common marine fishes and invertebrates of Alaska. Fairbanks (AK): Alaska Sea Grant College Program, University of Alaska Fairbanks, 358 p.

Harbo, RM. 1999. Whelks to whales: coastal marine life of the Pacific Northwest. Madeira Park (BC): Harbour Publishing, 248 p.

Lamb, A, and Hanby, BP. 2005. Marine life of the Pacific Northwest. Madeira Park (BC): Harbour Publishing, 398 p.

Pollard, WR, Hartman, GF, and Edgell, P. 1997. Field identification of coastal juvenile salmonids. Madeira Park (BC): Harbour Publishing, 32 p.